Airborne Radiation/Bioterrorism Countermeasures for Rapid Clearance of Inhaled Toxins and Radioactive Particles - $4.95 million

Parion Science

2525 Meridian Parkway

Suite 260

Durham, NC 27713

Parion Science is seeking federal funds to advance development of a pharmaceutical treatment to defend and protect troops against the inhalation of harmful particles ranging from dust and debris to agents used in nuclear/biological attacks such as radioactive particles or weaponized anthrax. In the lungs, innate mucous clearance provides broad protection against inhaled foreign agents by trapping particulate matter and subsequently clearing it. The research would continue development of a therapeutic agent that could greatly increase the rate of mucous clearance, thereby accelerating the removal of foreign materials from the lung and protecting them from tissue damage and disease.

In the field, soldiers may encounter numerous types of noxious particles including high levels of dust/debris, radiation particles (e.g. from the detonation of a "dirty" bomb), or bioterrorism agents (e.g. weaponized anthrax). This project would benefit troops by providing a safe, portable, and easy to use therapeutic treatment that is broadly effective in accelerating the clearance of all inhaled particles from the lung. The treatment would have a broad and significant impact on troop health, especially by protecting troops against radiological, chemical, or biological attacks.

Carbon Nanotechnology Energy Conversion and Storage Program - $4 million

North Carolina State University

Raleigh, NC 27695

International Technology Center

P.O. Box 23740

Research Triangle Park, 27709

North Carolina State University and the International Technology Center are seeking federal funds for development of energy conversion and storage technology. Thermal energy (heat) is produced when fuel is burned in vehicles or power plants, and it can be captured, converted, and stored rather than wasted. Thermal conversion devices can capture and convert the heat into electrical energy that can be stored in batteries, thus improving upon the overall energy utilization. This project would produce devices based on nanoscale diamond materials, which have unique surface properties for thermal-to-electrical energy conversion and energy storage.

The military has identified energy cost and availability as one of the key threats to U.S. global military reach and superiority and has prioritized research into innovative ways to increase energy efficiency. Currently, most major research efforts are directed toward identification of new energy sources such as biofuel sources or solar energy devices. There is relatively little effort toward new ways to make use of existing waste thermal energy, which will improve overall energy efficiency and therefore reduce the need for consumable energy resources. This project would develop innovative devices to more efficiently convert and store energy for use in existing energy sources and devices, including hydrogen fuel cells. Improving the energy efficiency of existing energy sources and devices will help the Defense Department more effectively meet its energy needs and improve our military's operational capabilities.

Center on Experiential Technologies for Urban Warfare and Disaster Response – $3.7 million

University of North Carolina at Chapel Hill

225 Sitterson Hall

Campus Box 3175

Chapel Hill, NC 27599

As a national leader in virtual reality environments and high-performance computing, modeling, and simulation, the University of North Carolina at Chapel Hill is seeking federal funds to establish a Center on Experiential Technologies. The Center would develop next-generation modeling, simulation, visualization and experiential technologies for urban warfare and disaster response. These technologies would facilitate training experiences that simulate key 21st-Century security challenges like urban warfare, close-proximity combat in large population masses, insurgent and terrorist scenarios, and natural disasters. The military increasingly uses such simulation training to enable leaders and responders to optimize their tactics using "what-if" simulations based on real world situations they may encounter. With the proposed Center, training could be more relevant, more frequent, more varied, and less costly than today's methods.

The proposed Center would improve our national security by preparing military personnel, first responders, intelligence personnel, and other governmental officials to better understand, analyze, and respond to complex conflict situations, terrorist attacks, and large scale disasters.

Clinical Studies for CEM-101 as a Malaria Prophylactic - $4.2 million

Cempra Pharmaceuticals

6340 Quadrangle Drive

Suite 100

Chapel Hill, NC 27517

Approximately 50% of the world's population is at risk for malaria, particularly those living in developing countries. Emerging resistance to existing preventive treatments are of growing concern to the U.S. military, which is often called upon to deploy on missions in endemic areas. Cempra is seeking federal funds to support clinical studies of CEM-101, an antibiotic compound with broad therapeutic applications in infectious diseases including a demonstrated capability to prevent malaria.

Malaria has been a formidable problem for the United States military, particularly for deployment, military exercises, and military actions in malaria endemic areas (Central and South America, the Caribbean, Africa, India, Southeast Asia and the Middle East). For example, during a 2003 peacekeeping mission in Liberia, 28% of the Marines deployed contracted malaria. Developing new prophylactic treatments would improve the health and readiness of military personnel.

Completion of Soldier Portable PowerCharge 250 Project - $5.6 million

INI Power Systems

175 Southport Drive Suite 100

Morrisville, NC 27560

The PowerCharge 250 is a clean, environmentally friendly, fuel cell enabled soldier portable power source that allows for efficient, quiet, rapid battery recharge in the field for our soldiers and special operations personnel. INI Power Systems is seeking federal funding to support further development and testing of the PowerCharge 250, accelerating its delivery to soldiers in the field. In addition to the environmental benefits of the product, the PowerCharge 250 would significantly reduce weight (by up to 25 lbs.) and bulk of power sources carried in nearly every soldier's pack. Reducing weight and bulk allows the soldier greater mobility with less fatigue and greater flexibility to carry additional provisions and equipment. The rechargeability of the battery would allow soldiers to carry out longer missions with less logistical support.

Federal support to complete development of the Power Charge 250 would enhance the readiness and safety of the military warfighter. The device would significantly reduce battery weight in soldier packs, leaving more room for critical life-saving and protective equipment, and would provide sustainable power for longer missions. In addition, the project would deliver a cost savings to taxpayers because life-cycle costs of rechargeable fuel cells are significantly lower than comparable costs of batteries.

Continuing Development of Extended Lifetime Radioisotope Batteries - $4 million

Alpha V

620 Park Place

Chapel Hill, NC 27514

Alpha V is seeking federal funds to develop miniature, extremely long life (20+ years) batteries for use in sensors, tracking devices, and other electronic devices to support U.S. Special Forces operations. The ability to provide a reliable power source for autonomous sensors for longer than five years is essential to maximize the advantages of remote sensor networks. Wireless sensor networks with extended battery life will dramatically reduce risk to Special Forces personnel by extending the useful lifetimes of these devices and decreasing the frequency with which they need to be replaced. Special Forces personnel will be able to place sensors and use them for 20 years or more without having to replace the battery.

Batteries that can provide a long-term power source – without any recharging, maintenance, or replacement – for surveillance and tracking of hostile forces, or for guidance and navigation, present clear benefits to U.S. military efforts to fight terrorism.

Continuing Development of High-Frequency, High-Power Electronic and Optoelectronic Devices on Aluminum Nitride (AlN) - $6.6 million

Hexatech

991 Aviation Parkway

Morrisville, NC 27560

Aluminum Nitride (AlN) is a promising semiconductor material under development for use in high-performance electronic and optoelectronic devices, which are highly sought by the military for next-generation wireless and optical communications applications, radar technology, early warning systems, and biochemical defense. It offers significant potential improvements over existing materials in power, efficiency, and reliability, translating into far greater performance using less energy. Hexatech is seeking federal funding to accelerate development of Aluminum Nitride materials and high-performance Aluminum Nitride devices in order to improve the efficiency and reliability of military systems, including communications systems, sensors, electronic warfare applications, and radars.

Our nation's readiness needs require that the military stay on the leading edge of electronic technology. The proposed research would open new avenues for military and homeland security applications in wireless and optical communications, radar technology, early warning systems, and biochemical defense. It also would develop devices that can meet the military's increasing bandwidth and power needs for tactical communications.

Dynamic Optical Threat Imaging (DOTI) - $6.0 million

Research Triangle Institute (RTI)

P.O. Box 12194/ 3040 Cornwallis Road

Research Triangle Park, NC 27709

Detecting visual anomalies is a primary defense method against threats such as improvised explosive devices (IEDs) and suicide bombers. Defensive protection against these threats and imaging of contraband such as narcotics and weapons caches are critical to the mission of the Defense Department. Research Triangle Institute is seeking federal funds to develop

technologies in high-speed imaging and multispectral imaging, beginning with a demonstration of a near real-time multispectral imager. Such an imager would provide anomaly-detection capability that could "see through" camouflage and other enemy deception techniques.

Dynamic Optical Threat Imaging technology would help military service members and intelligence personnel identify threats more quickly and more accurately, thereby helping to prevent attacks on U.S. personnel and facilities and thus saving lives. It would also help the military identify contraband smuggling, weapons caches, and potentially hostile forces, enhancing mission performance.

Low-Defect Density Gallium Nitride Materials for High-Performance Electronic Devices – $4 million

Kyma Technologies

8829 Midway West Road

Raleigh, NC 27617

Gallium Nitride is a promising semiconductor material under development for use in high-performance electronic devices, such as radars, communications systems, power switching, and hybrid vehicle electronics. It offers significant potential improvements over existing materials in power, efficiency, and reliability, translating into far greater performance using less energy. Kyma Technologies is seeking federal funds to accelerate development of Gallium Nitride materials and high-performance Gallium Nitride devices in order to improve the efficiency and reliability of military systems, including the Navy All-Electric Ship, the Army Joint Light Tactical Vehicle, and the Air Force More Electric Aircraft.

The military has identified energy cost and availability as one of the key threats to U.S. global military reach and superiority, and has prioritized research into innovative ways to increase energy efficiency. Moreover, ever-evolving technologies used by modern systems throughout the military require more powerful, more reliable electronic devices. The proposed project would (1) save taxpayers money by increasing energy efficiency of numerous military systems, thereby reducing energy usage and costs; (2) enhance U.S. national security by helping to maintain military technological superiority; and (3) promote the development of electronic technologies that could have numerous important non-defense applications, such as increased electrical efficiency of traditional, hybrid, and electric vehicles and improved electric grid stability.

Magneto-Rheological (MR) Suspensions for Tactical Wheeled Vehicles - $3 million

LORD Corporation

111 LORD Drive

Cary, NC 27511

LORD Corporation is seeking federal funding to retrofit Army Tactical Wheeled Vehicles (including Humvees, MRAPs, and Medium Tactical Vehicles) with Magneto-Rheological (MR) Suspensions, an innovative new type of suspension that is highly reactive to road conditions. Magneto-Rheological Suspensions significantly reduce absorbed energy (~50%) and peak dynamic loads (~60%) into the vehicle, and control vehicle pitch and roll motions (~30%). These benefits translate into increases in vehicle safety and performance, as well as a significant reduction in the likelihood of vehicle roll-overs. Fitting Tactical Wheeled Vehicles with MR Suspensions has the potential to greatly reduce Army combat casualties.

The project will greatly improve overall mobility (generally, a vehicle fitted with an MR Suspension can negotiate terrain twice as fast as traditional technology with equal absorbed

power), maneuverability, and performance of our military vehicles in the field. It also would extend the useful lifespan and increase mission readiness of tactical wheeled vehicles, thereby saving taxpayers money. Most importantly, the technology will save soldiers lives and reduce traumatic injuries by significantly reducing the occurrence of vehicle roll-overs.

Man-Portable Unmanned Underwater Vehicle (UUV) for Mine and Expeditionary Warfare - $3.5 million

iRobot

4625 Industry Lane

Durham, NC 27713

iRobot is seeking federal funds to accelerate final development and deployment of a modular, low cost man-portable Unmanned Underwater Vehicle (UUV), designed for very shallow water operations. This UUV would support mine (that is, identifying and destroying underwater mines) and expeditionary warfare (that is, operations taking place between naval ships and the shoreline) missions. These vehicles are designed to be affordable in large numbers, lightweight, and responsive to evolving requirements of expeditionary warfare.

Unmanned Underwater Vehicles would allow the Navy to strengthen its capabilities to carry out expeditionary warfare missions and to detect and defeat enemy mines without placing military service members in harm's way. These vehicles would both enhance U.S. naval superiority and improve protections for American service members.

Microfiber PEM Fuel Cell and Hydrogen Generation Technology Development - $4 million

Microcell

6003 Chapel Hill Road, Suite 153

Raleigh, NC 27607

The Navy has a stated need for power generation units that include high-power, high-efficiency hydrogen fuel cells in order to reduce Navy fuel needs and costs. Microcell is seeking federal funding to help meet this need using a unique extrusion-based manufacturing process to produce low cost fuel cells with the potential to break the cost barrier of the conventional fuel cell technology. The fuel cells would use a "plug and play" design for easy repair and maintenance. This process would provide for lower production cost and high power density (allowing for more power in smaller units).

The military has identified energy cost and availability as one of the key threats to U.S. global military reach and superiority, and has prioritized research into innovative ways to increase energy efficiency. The Navy has a stated need for power generation units that include high-power, high-efficiency hydrogen fuel cells in order to reduce navy fuel needs and costs. This project will develop high-power, high-efficiency fuel cells that will save taxpayers money by increasing energy efficiency of Navy platforms and enhance the Navy's ability to carry out its mission by reducing its logistical dependence on fuel and extending its reach.

Multi-Level (ML) Wiki System for Real-Time, Cross-Domain Intelligence Sharing - $2 million

Trident Systems Incorporated

One Copley Parkway, Suite 410

Morrisville, NC 27560

Trident is seeking federal funds to develop a vital new capability for intelligence-sharing that provides for the first fully-certified cross-domain "Wiki" system, enabling real-time communication of sensitive and classified between users across different classification levels, government agencies, and allied governments. Supporting real-time document collaboration across networks operating at different security levels has been demonstrated as a capability that will directly support the war on terrorism and is urgently needed to help analysts, planners, and warfighters overcome the significant blockages in intelligence sharing identified, for example, by the 9-11 Commission. The ML Wiki System would establish a certified, secure environment that would allow intelligence personnel and military operators in different agencies, from different Coalition partners, or on different security levels to collaborate and share information without delay.

ML Wiki would significantly improve intelligence-sharing and collaboration between different U.S. and international partners, overcoming a key shortcoming identified in U.S. defenses against terrorism. Such intelligence-sharing would support a more effective, more successful fight against terrorism, enhancing U.S. national security.

Nanofluidic Lubricants for Increased Fuel Efficiency in Heavy Duty Vehicles - $1.5 million

International Technology Center

P.O. Box 13740

Research Triangle Park, NC 27709

Nanofluids are fluids that contain a small concentration of nanoparticles, or microscopic particles. Recent research has shown that adding certain nanoparticles to fluids has the potential to alter the physical properties of the fluids in ways that enhance performance. Adding nanoparticles to fluids such as motor oil, transmission fluid, fuel, and coolant can achieve significant benefits in terms of improved vehicle fuel efficiency, increased performance, lower maintenance, and extended lifespan. For example, the addition of nanoparticles to motor oil can significantly reduce engine friction and wear, and studies have suggested that doing so could increase fuel efficiency by up to 20 percent. International Technology Center is seeking federal funds to support continuing research into the development of nanofluids for increasing fuel efficiency, engine performance, and other favorable properties for military vehicles.

The military has identified energy cost and availability as one of the key threats to U.S. global military reach and superiority, and has prioritized research into innovative ways to increase energy efficiency. The proposed project will (1) save taxpayers money by increasing energy efficiency of any vehicle powered by an engine (including wheeled vehicles, airplanes, and ships), thereby reducing energy usage and costs; (2) help reduce U.S. military dependence on foreign oil; and (3) promote the development of nanofluids that could have significant positive benefits for taxpayers, such as nanofluidic motor oil to increase passenger vehicle fuel efficiency.

National Functional Genomics Center - Preclinical and Translational Research Center - $2.9 million

Lineberger Comprehensive Cancer Center

UNC School of Medicine

Chapel Hill, NC 27599

Cancer, the second-leading cause of death in the United States, remains a significant threat to the health of Americans, including military service members. Although there are significant federal investments in cancer research, only 5% of new treatments for major cancers are approved for clinical use. The vast majority are not approved because current methods of testing potential drugs prior to human trials have limited accuracy. UNC – Chapel Hill's Lineberger Cancer Center is seeking to accelerate the discovery of the molecular signatures for cancers for the early detection and effective treatment of cancers. The Pre-Clinical and Translational Research Center would drive the development of new technologies to identify novel approaches to attack cancer, such as improved cancer modeling for drug discovery, and bioinformatics to better identify important genetic and epigenetic targets and proteins that can be used for drug screening and developing new therapeutics.

The Department of Defense spends over $40 billion per year in order to maintain benefits for 9.2 million eligible military members, their families, and retirees. A significant percentage of those costs relate to cancer treatment. Better detection and treatment would have significant benefits for public health and would reduce the proportion of the federal budget that must be devoted to health care costs.

North Carolina National Guard Family Assistance Centers - $2 million

North Carolina National Guard

Claude T. Bowers Military Center

4105 Reedy Creek Road

Raleigh, NC 27607

The North Carolina National Guard (NCNG) has experienced an unprecedented operational pace that includes mobilizing over 95% of its force. Current indications are that this pace will continue for the foreseeable future. These mobilizations have a significant effect on Guard families and children, who experience this impact not only during the deployment, but prior to and especially after the service member returns. Family Assistance Centers (FACs) provide essential support and services to families of members of the NCNG and of all the other Armed Services. These services include counseling, health care information, financial advice, employer support, legal support and guidance, crisis referral, community outreach, veteran affairs and more. NCNG families are spread throughout the state and in most cases cannot easily access services on military installations. NCNG is seeking federal funds to establish FACs across the state so that they Guard can provide consistent and continuous vital support and services to the families of members of the NCNG and the Armed Services.

The Defense Department has identified support for families during deployment as a key influence on the readiness of deployed military personnel. Moreover, support for military families plays a major role in service members' decisions on reenlistment, directly impacting retention rates. This program would significantly reduce the impact of deployment on families and would directly contribute to sustaining and retaining a strong North Carolina National Guard.

Secure Open Systems Initiative (SOSI) - $4 million

North Carolina State University

Raleigh, NC 27695

The Secure Open Systems Institute is a multi-disciplined research, development and collaboration between North Carolina State University and government and corporate partners. Its mission is to proactively work to prevent cyber-based attacks on open source software and

open systems, which are increasingly used by the Department of Defense in applications including weapons systems, communications, power grids, training modules, and so on. NCSU is seeking federal funding for SOSI to perform two functions. First, it would serve as a recognized center for vetting open source and open systems technology for security assurance, improving DoD's confidence in the security of its systems. Second, it would offer a virtual computing research test bed to facilitate open systems research that will improve the security of current systems and help develop new and innovative approaches to open system security.

As recent cyberattacks in Estonia, Georgia, and the United States demonstrate, cyberwarfare is a serious and growing threat to our national security. With nearly every component of the military reliant upon computer and information technology, cyberattacks could significantly degrade our military readiness without adequate protections in place. As the Department of Defense and other government departments turn increasingly to open source and open systems technology, SOSI will help ensure our protection against cyberattacks.

Silicon Carbide MOSFETs (Metal Oxide Semiconductor Field Effect Transistor) Power Modules for Combat Hybrid Electric Vehicles - $3.4 million

Cree

4600 Silicon Drive

Durham, NC 27703

Cree is seeking federal funding to develop high-power, high-temperature Silicon Carbide (SiC) MOSFET power modules. These modules would be used to dramatically enhance the performance of hybrid electric engines and power trains in new hybrid Army combat vehicles currently under development, such as the Future Combat Systems (FCS) and Manned Ground Vehicles (MGVs), as well as the Air Force's More Electric Aircraft and several Navy platforms. The SiC MOSFET power modules would be used in electric traction drive components and

motor drive power conditioning, control, and power distribution. The modules would replace existing Silicon-based modules, bringing significant upgrades in power, energy efficiency, temperature thresholds, and range.

The military has identified energy cost and availability as one of the key threats to U.S. global military reach and superiority, and has prioritized research into innovative ways to increase energy efficiency. Each service is developing vehicles that are far more energy efficient, requiring significantly less fuel, and the SiC MOSFET power module could reduce energy usage by 10 percent or more over current systems. The proposed project would 1) save taxpayers money by increasing energy efficiency of numerous military systems, thereby reducing energy usage and costs; (2) enhance U.S. national security by helping to maintain military technological superiority; and (3) promote the development of electronic technologies that could have numerous important non-defense applications, such as increased electrical efficiency of traditional, hybrid, and electric vehicles.

Spray-Dried Plasma for Combat Casualties - $7.5 million

Entegrion

79 TW Alexander Drive

Research Triangle Park, NC 27709

Entegrion is seeking federal funding to develop and manufacture a dried, easy to use, therapeutic blood plasma for the treatment of bleeding after traumatic battlefield injuries. Trauma is the single largest cause of long term disability in the United States, and bleeding is the number one cause of death in trauma. The dried plasma could be applied to trauma wounds to help accelerate blood clotting, thus stopping blood loss and preventing serious disability and loss of life. The project would further develop existing plasma treatments to produce one that could be stored and transported stably and for long periods of time. The resulting product would

be well-suited as a treatment for military first responders to use to stop or slow traumatic bleeding in injuries incurred in battlefield settings.

The availability of spray-dried plasma would improve battlefield medical care for combat casualties in remote, austere, and undeveloped areas where the availability and/or safety of blood products is limited or nonexistent. The product also would have broad applicability in civilian health care settings, particularly in rural and medically underserved areas with limited access to refrigerated or frozen blood bank products.

Study on Nanotechnology and Related Health Effects - $4 million

Alion Science and Technology

1000 Park 40 Plaza, Suite 200

Durham, NC 27713

Nanotechnology is the manipulation of matter at a nanometer length to produce structures which can be engineered into new products that exhibit extraordinary properties and characteristics. Thousands of newly engineered novel materials, including nanomaterials, are being developed that contain unique physicochemical properties due to their size, shape, composition, surface properties, and solubility. There are very few studies on the health and safety of these materials, and there is currently no specific national or international standard for managing these novel materials due to limited data. Alion Science & Technology is seeking federal funding to conduct a scientific study to characterize and assess potential health hazards associated with the growth of novel materials, including nanotechnology applications. It would also develop a novel material physicochemical property database and carry out toxicity tests that would provide information for the establishment of Best Management Practices (BMPs) of nanomaterials.

The Defense Department uses nanotechnology and nanomaterials in the development of battery technology, circuitry, sensors, lighter bullet proof vests and armor, smart coatings, explosives, propellants, and warheads, among other things. Understanding, characterizing, and developing techniques to mitigate the health impacts of nanotechnology and nanomaterials would help ensure that military personnel and individuals working in the defense industry are not exposed to harmful materials that could create serious health problems.

Test and Development Upgrade of the Army Distributed Learning System - $6.5 million

IBM

3039 East Cornwallis Road

Research Triangle Park, NC 27709

The Army's Distributed Learning System (DLS) program distributes training and continuing education courses to Army soldiers and civilians around the world so that, in many cases, personnel can take essential Army training at their home station rather than traveling to distant installations. The Army has elected to use the DLS system as the primary delivery mechanism for distance training. Well tested and fully developed computer hardware and software systems are needed for delivering trainings and managing the DLS. IBM is seeking federal funds to establish a significant capability allowing for such testing and development efforts to be accomplished through a system separate from the DLS delivery systems, thereby ensuring the stability of the training delivery system and preventing disruptions in service.

Having a test and development center with hardware that matches the production system would significantly enhance the program's ability to delivery enhancements and solutions that are well constructed and do not create problems when integrated into the production system. This

capability would ensure continuity and quality in Army training and education, and will lower costs associated with system maintenance and restoration.

Report Language: Umbilical Cord Research at Womack Army Medical Center

Research has shown that cord blood transplantation can achieve unique and striking results in treating leukemia, lymphoma, and certain other cancerous blood diseases, immunodeficiency syndromes, bone marrow failure syndromes, sickle cell anemia and thalassemia and some inherited metabolic diseases. The Committee is aware of a pilot effort underway at the Womack Army Medical Center in Fayetteville, NC, in collaboration with the Carolinas Cord Blood Bank and the National Cord Blood Inventory, to create the nation's first military collection site for cord blood. This initiative will increase the national cord blood inventory and enhance the national capacity to indentify suitable transplant donors, particularly among minority communities. The Committee commends the Womack Army Medical Center and encourages the Army to consider extending this pilot to all of its obstetrical healthcare facilities.

Umbilical cord blood research is yielding significant promise in terms of possible treatments for leukemia, lymphoma, and other blood cancers, immunodeficiency syndromes, bone marrow failure syndromes, sickle cell anemia and thalassemia, and some inherited metabolic diseases. Congress has authorized and funded the C.W. Bill Young Cell Transplantation Program and National Marrow Donor Program to assist patients in locating suitable transplant donors. Because tissue types are inherited and the possible types are very diverse, patients are more likely to match someone from their own race or ethnicity. African Americans have the most difficulty identifying a matched donor. Adding cord blood units from diverse racial and ethnic backgrounds to the NMDP Registry is a critical need to increase the likelihood that all patients will find the match they need. Military bases have been identified as promising locations for recruiting a diverse sample of cord blood donors because of the diversity of military communities. The Womack Army Medical Center at Fort Bragg is already taking steps to establish, in coordination with the Carolinas Cord Blood Bank at Duke University, the first military cord blood collection site. This partnership has tremendous potential to benefit public health and to serve as a model for other military medical facilities. The requested report language would commend the efforts of Womack Army Medical Center and encourage the Defense Department to replicate its efforts nationwide.

Expanding the cord blood donor pool for the National Marrow Donor Program Registry would ensure that cord blood treatments for numerous diseases, including leukemia, lymphoma, other blood cancers, immunodeficiency syndromes, sickle cell anemia, thalassemia, and certain metabolic diseases would be available for a larger number of patients, saving lives and improving public health.